



USAG REDSTONE

Engineering Division

Typical Project Schedule
and Design Guidelines

1. Job Order Request

Customer submits on-line Job Order Request (JOR)

- Request must contain general description of new building, addition, or renovation
- Request must contain description of any specialized requirement or equipment
- Request should mention “Design Funds are Available” if approved
- Request should mention “Construction Funds are Available” if approved

JOR is evaluated at Project Review Meeting

- Project Review Meeting is each Wednesday, 9:00 AM, Bldg. 4488, Room A-303

JOR is approved and sent to Engineering Division

- JOR is assigned to Project Manager for coordination with customer and eventual Design

2. Project Manager coordination with customer

Customer provides design guidance

- Functional and size requirements of new building, addition, or renovation
- Site orientation, access, parking, utilities, interior layout requirements, offices/open bays

Customer provides any specialized requirements

- Temperature and/or humidity requirements, high bay space, overhead crane, etc.
- Site relationship with other buildings, site features, oil/water separator, roll-up doors, etc.

Customer verifies design funds have been provided

- Design cannot begin without approval and release of design funds, 8% of construction cost

Customer verifies construction funds are available

- Design cannot begin without approval of design funds, actual request at design completion

3. Project Manager assigns project to Design Team

Design lead contacts customer for design guidance

- Functional and size requirements of floor plan, ceiling heights, door/window locations
- Offices, open cubicle bays, conference room, restrooms, electric/mechanical rooms
- If cubicle bays, are workstations hard wired or stand-alone, what are partition heights
- Any non-typical electrical, lighting, HVAC, fire protection, access, security requirements

Customer contacts NEC-R for communication design

- New Construction POCs:
 - Steve Gover - 256-842-2355 - steven.gover@us.army.mil
 - Barry Tidmore - 256-450-9996 - barry.tidmore@us.army.mil
- Provide anticipated telephone, network, secure network requirements
- Communication design and installation is funded separately from building construction
- Failure to contact NEC-R at early design stage will result in project delays

4. 10% design review and approval

Architect/engineer provides customer 10% design

- Final architectural floor plan
 - will include location of all rooms, walls, doors, windows, cubicle layout
- Preliminary civil site plan
 - will include building location, roads, parking, driveway, prominent site features

Customer provides 10% review and approval

- Corrections/additions/changes are incorporated into drawings and design continues
- No further changes to architectural floor plan accepted after this review
- Late changes will result in a minimum 25% design fee increase
- Late changes will result in delayed design completion date
- Late changes will result in delayed construction completion date

5. 50% design review and approval

Architect/engineer provides customer 50% design

- Final civil site plan
 - will include building location, roads, parking, driveway, all utilities, and site features
- Final architectural ceiling plan, building elevations, and sections
- Preliminary electrical, HVAC, plumbing, and fire protection plans
 - will include location of all major fixtures and systems

Customer provides 50% review and approval

- Corrections/additions/changes are incorporated into drawings and design continues
- No further changes to civil site plan accepted after this review
- Late changes will result in a minimum 25% design fee increase
- Late changes will result in delayed design completion and construction completion dates

6. 90% design review and approval

Architect/engineer provides customer 90% design

- Final electrical, HVAC, plumbing, and fire protection plans
 - will include location of all fixtures, systems, and elements
- Preliminary electrical, HVAC, plumbing, and fire protection support sheets
 - will include preliminary details and schedules

Customer provides 90% review and approval

- 90% review is for final customer approval, no major changes are expected at this stage
- Minor corrections or additions are incorporated into drawings and design is finalized
- No further changes to any major system accepted after this review
- Late changes will result in a minimum 25% design fee increase
- Late changes will result in delayed design completion and construction completion dates

7. Project cost estimate, negotiation, and award

Project Manager provides drawings to contractor

- Project Manager completes Independent Government Estimate
- General Contractor completes contractor's construction estimate
- General Contractor receives bids from sub-contractors
- Project Manager and General Contractor negotiate final construction cost

Project Manager requests construction funding

- Project Manager requests construction funds from customer through Budget Office
- Customer must provide funds when requested to avoid delay of project Award
- Funding package routed for approval and sent to Acquisition for Award
- Acquisition Center obtains legal review and awards Delivery Order

8. Pre-construction meeting and Notice to Proceed

Project Manager schedules pre-construction meeting

- Pre-con meeting held at customer's building/project site, attendees include :
 - Customer's representatives
 - DPW Project Manager
 - DPW Construction Inspector (quality assurance)
 - General Contractor's Project Manager
 - General Contractor's Construction Inspector (quality control)
 - Major sub-contractor 's representatives

Award of Delivery Order and Notice to Proceed

- General Contractor receives Award of Delivery Order from Acquisition Center
- General Contractor's acceptance of Award becomes Notice to Proceed

9. Additional Opportunities for savings

Cut design fee to 5%, Cut design time by 75%

- Customer can choose an existing design (off-the-shelf) of a previously built building
- Customer can choose among several sizes/types of buildings
- No changes to floor plan, ceiling plan, building elevations, or sections will be allowed
- No changes to electrical, HVAC, plumbing, or major systems will be allowed
- No changes to interior materials, fixtures, finishes, colors will be allowed
- Civil site plan will be new design to accommodate site specific features, utilities, access

Construction costs known up-front

- Project Manager will request design fee immediately, customer must provide up-front
- Architect/engineer will provide 50% and 90% site plan for review and approval of customer
- Project Manager will request construction funds after 90% customer review